



Covestro Makrolon® LED5102

UV-Stabilized Polycarbonate
for Secondary Optics
in the General Lighting Industry

Makrolon®

covestro.com



► Superior Optical Performance

For decades, technical designers for optical applications have trusted the Makrolon® polycarbonates portfolio for flame retardance, mechanical robustness and thermal stability.

Makrolon® LED5102 offers superior optical performance for luminaires using LED light sources outplaying existing Makrolon® grades and major competitor products. It is the first-choice solution for the manufacturing of high quality optics.

- High transparency and long lifetime
- Good flowability that allows injection molding of large parts with complex geometries still maintaining high mechanical properties
- UV-stabilization plus excellent transmission at wave lengths of visible light
- an optimized balance between UV-stabilization and visual appearance

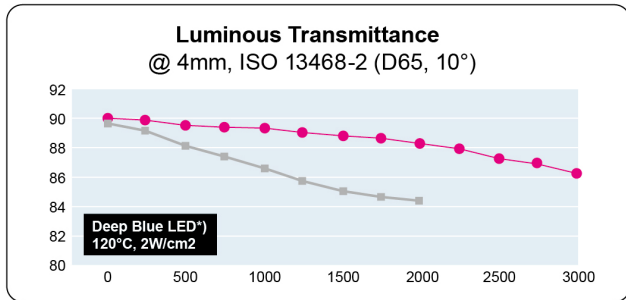
Material / Properties @ 4mm	Makrolon® 2407 550115	Makrolon® LED5102 000000	Major competitor product
UV-stabilized	☑	☑	☑
Ty (D65, 10°)	88.7 ⊖ ⊖	90.0 ⊕ ⊕	89.6/89.9 ⊕
YI (D65, 10°)	0.12* ⊖	1.2 ⊕	1.2/1.6 ⊖
Haze [%]	<1.0	0.2	0.2
MVR	19	34	19

*: Indicative value, not a specification

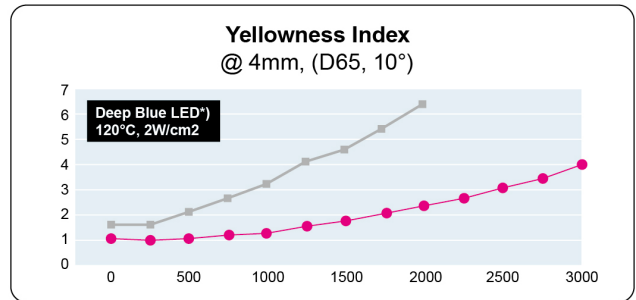
► Longevity and Lower Cost

Covestro's experimental results demonstrate that over time, Makrolon® LED5102 features

- Better retention of light transmittance with less yellowing
- Mechanical stability under exposure of LED light and heat
- Better long-term performance (efficacy measured by lumen per Watt) in luminaires
- Possibilities for cost reduction by using less LEDs



● Makrolon® LED5102 000000
■ Competitive grade



*: Using internal methods

► Covestro, Your Innovation Partner

Covestro was the inventor of polycarbonate and has been championing it for decades. Our heritage and appreciation of partnerships enables us to push the boundaries in material science with customers and convert imagination into valuable products.

- ✉ If you want to know how Covestro makes the world a brighter place or whether Makrolon® LED5102 is a fit for your next endeavor, please write to plastics@covestro.com for more information.



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